WHAT IS CLAIMED IS:

1. A spray tool apparatus for spraying polyurethane, comprising:

a plurality of supply sources, each supply source containing one of a plurality polyurethane constituents;

a plurality of recirculating fluid circuits each in fluid flow communication with one of the supply sources for distributing one of the polyurethane constituents;

a mix head connected to each of the fluid circuits that receives from each fluid circuit one of the polyurethane constituents, the mix head having a chamber in which the plurality of polyurethane constituents are mixed to form a polyurethane mixture;

a hydraulically operated valve for controlling the flow of the polyurethane constituents to the mix head, the valve having a first position in which the polyurethane constituents flow into the chamber of the mix head and a second position in which the polyurethane constituents are recirculated through the fluid circuits without being mixed in the mixing chamber; and

a spray nozzle assembly through which the polyurethane mixture is dispensed when the valve is in the first position.

2. The apparatus of claim 1 wherein the polyurethane constituents are polyol, isocyanate, and pigmented polyol.

3. The apparatus of claim 1 wherein the recirculating fluid circuits each have a separate pump for pressurizing one of the polyurethane constituents.

4. The apparatus of claim 1 further comprising a liquid solvent supplied to the mix head under pressure to purge the polyurethane mixture from the chamber in the mix head and the spray nozzle assembly when the valve is in the second position.

5. The apparatus of claim 1 wherein the hydraulically operated valve has a hydraulically actuated piston that is provided with separate channels for each of the polyurethane constituents through which the constituents flow when the valve is in the second position.

6. The apparatus of claim 1 wherein the hydraulically actuated valve is operated by a hydraulic fluid circuit that has a reciprocating piston that shifts the valve between the first and second positions.

7. The apparatus of claim 1 wherein the hydraulically actuated valve is operated by a hydraulic fluid circuit that has a reciprocating piston that shifts a valve spool within an elongated chamber, the valve spool and chamber being sealed relative to each other as the valve spool moves between the first and second positions.

8. The apparatus of claim 7 further comprising a seal secured to the valve spool that seals against the chamber.

9. The apparatus of claim 1 wherein the spray nozzle assembly has a tubular portion and a static helical mixing vane disposed in the tubular portion that mixes the polyurethane mixture before the polyurethane mixture is dispensed through a nozzle tip.

10. The apparatus of claim 1 wherein the mixture of polyurethane is sprayed on a mold to form a polyurethane skin for a vehicle interior part.

11. A method of forming a polyurethane skin for an interior part of a vehicle, comprising:

pumping an isocyanate composition to a mix head;

pumping a polyol composition to the mix head;

opening a valve selectively to allow the polyol composition and the isocyanate composition to be injected under pressure into a mixing chamber defined by the mix head in a first position to create a polyurethane reactant mixture;

closing the valve selectively to allow the polyol composition and isocyanate composition to be recirculated through the valve in a second position;

moving the valve with a hydraulically actuated cylinder that moves a valve element within a valve body between the first position and the second position;

dispensing the polyurethane reactant mixture through a spray nozzle; and

shaping the polyurethane reactant mixture on a mold surface to form a polyurethane skin.

12. The method of claim 11 further comprising mixing the polyurethane reactant mixture with a static helical mixing vane disposed in a tubular portion of the spray nozzle.

13. The method of claim 11 further comprising spraying a solvent into the mixing chamber when the valve is in the second position to purge the polyurethane reactant mixture from the mixing chamber and the spray nozzle.

14. The method of claim 11 wherein the valve element further comprises a piston that is provided with a first separate channel for the isocyanate composition and a second separate channel for the polyol composition, wherein each of the compositions flow through one of the separate channels when the valve is in the second position.

15. A method of forming a polyurethane skin for an interior part of a vehicle, comprising:

pumping an isocyanate composition to a mix head;

pumping a polyol composition to the mix head;

pumping a pigmented polyol composition to the mix head;

opening a valve selectively to allow the polyol composition, the isocyanate composition, and the pigmented polyol to be injected under pressure into a mixing chamber defined by the mix head in a first position to create a pigmented polyurethane reactant mixture;

closing the valve selectively to allow the polyol composition, isocyanate composition, and the pigmented polyol to be recirculated in a second position;

moving the valve with a hydraulically actuated cylinder that moves a valve element within a valve body between the first position and the second position;

dispensing the pigmented polyurethane reactant mixture through a spray nozzle; and

shaping the pigmented polyurethane reactant mixture on a mold surface to form a polyurethane skin.

16. The method of claim 15 further comprising mixing the pigmented polyurethane reactant mixture with a static helical mixing vane disposed in a tubular portion of the spray nozzle.

17. The method of claim 15 further comprising spraying a solvent into the mixing chamber when the valve is in the second position to purge the pigmented polyurethane reactant mixture from the mixing chamber and the spray nozzle.

18. The method of claim 15 wherein the valve element further comprises a piston that is provided with a first separate channel for the isocyanate composition, a second separate channel for the polyol composition, and a third separate channel for the pigmented polyol composition, wherein each of the compositions flow through one of the separate channels when the valve is in the second position.